

# Work Order ID 87953

**\*87953\***

Page 1

July-19-12 3:35:20 PM

Item ID: D2423

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Lug Extrusion

Stop **\*NS2\***

Start Date: 19/07/2012 Start Qty: 288.00

**\*288\***

Cust Item ID:

Required Date: 02/08/2012 Req'd Qty: 288.00

**\*288\***

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 12/07/19

Tooling:

Date:

Run Start **\*NR1\***

QC: Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description                   | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| <b>Draw Nbr</b>                | <b>Revision Nbr</b>                        |                      |         |        |              |               |               |                  |                |
| D2423                          | Rev B1                                     |                      |         |        |              |               |               |                  |                |
| 100                            | PURCHASING                                 | 0.00                 |         |        |              |               |               |                  |                |
| <b>*100*</b>                   |  |                      |         |        |              |               |               |                  |                |
| Purchasing                     | Memo                                       | 0.00                 |         |        |              |               |               |                  |                |
| Purchasing                     | Issue P/O: <u>17513</u>                    |                      |         |        |              |               |               |                  |                |
|                                | Manufacture as per Dwg                     |                      |         |        |              |               |               |                  |                |
|                                | Possible Supplier: SIGNATURE ALUMINUM      |                      |         |        |              |               |               |                  |                |
|                                | Material release note is required          |                      |         |        |              |               |               |                  |                |
| 110                            | Receive & Inspect for Damage & Mat'l Certs | 0.00                 |         |        |              |               |               |                  |                |
| <b>*110*</b>                   |  |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo                                       | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      |  |                      |         |        |              |               |               |                  |                |
| 120                            | QC6- Inspect dimensions to drawing         | 0.00                 |         |        |              |               |               |                  |                |
| <b>*120*</b>                   |  |                      |         |        |              |               |               |                  |                |
| QC                             | Memo                                       | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |  |                      |         |        |              |               |               |                  |                |

CZ 12/07/20 288

288 SP  
12-8-22

**DAS**  
**16**  
**9-3** 12/07/19

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Setup         |      |      |     |   |                   |                    |             |              |              |
| Other         |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

**FAULT CATEGORY**

| Landing Gear  | General                                 | Other  |
|---|---|--|
| <input type="checkbox"/> Bending                      | <input type="checkbox"/> Bend           | <input type="checkbox"/> Grain                           |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route      | <input type="checkbox"/> Hardware                        |
| <input type="checkbox"/> Cracks                       | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete           |
| <input type="checkbox"/> Crushed/Crimped              | <input type="checkbox"/> Burrs          | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs                        | <input type="checkbox"/> Contamination  | <input type="checkbox"/> Maintenance                     |
| <input type="checkbox"/> Heat Treat                   | <input type="checkbox"/> Countersink    | <input type="checkbox"/> Mislabeled                      |
| <input type="checkbox"/> Inspection Strip in Tube     | <input type="checkbox"/> Cut Too Short  | <input type="checkbox"/> Misread                         |
| <input type="checkbox"/> Ripples in Bend              | <input type="checkbox"/> Drill Holes    | <input type="checkbox"/> Offset                          |
| <input type="checkbox"/> Torque Waves in Extrusion    | <input type="checkbox"/> Drawing        | <input type="checkbox"/> Out of Calibration              |
| <input type="checkbox"/> Turning Sequence             | <input type="checkbox"/> Finish         | <input type="checkbox"/> Out of Sequence                 |
| <input type="checkbox"/> Wave/Twist in Tube           | <input type="checkbox"/> Folio          | <input type="checkbox"/> Outside Dimensions              |
|   |   | <input type="checkbox"/> Ovalized                        |
|   |   | <input type="checkbox"/> Over/Under tolerance            |
|   |   | <input type="checkbox"/> Part Incorrect                  |
|   |   | <input type="checkbox"/> Part Lost/Missing               |
|   |   | <input type="checkbox"/> Part Moved                      |
|   |   | <input type="checkbox"/> Positioned Wrong                |
|   |   | <input type="checkbox"/> Power Loss/Surge                |
|   |   | <input type="checkbox"/> Pressure/Forced                 |
|   |   | <input type="checkbox"/> Temperature/Cure                |
|   |   | <input type="checkbox"/> Weld                            |
|   |   | <input type="checkbox"/> Wrong Stock Pulled              |
|   |   | <input type="checkbox"/> Other                           |

# Work Order ID 87953

**\*87953\***

Page 2

July-19-12 3:35:20 PM

Item ID: D2423

Accept

**\*N9000040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Lug Extrusion

Stop **\*NS2\***

Start Date: 19/07/2012 Start Qty: 288.00

**\*288\***

Cust Item ID:

Required Date: 02/08/2012 Req'd Qty: 288.00

**\*288\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

Identify as per dwg & Stock Location: Mat 6

0.00

**\*130\***

Packaging

Memo

0.00

Packaging

288 2 12/09/11

140

QC21- Final Inspection - Work Order Release

0.00

**\*140\***

QC

Memo

0.00

Quality Control

12/19/12 JJ

ME  
12-09-01

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Skid-tube <input type="checkbox"/></td> <td style="width: 33%;">Crosstube <input type="checkbox"/></td> <td style="width: 33%;">Water Jet <input type="checkbox"/></td> <td style="width: 33%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Setup         |      |      |     |   |                   |                    |             |              |              |
| Other         |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

**FAULT CATEGORY**

| Landing Gear  | General                                 | Other  |
|---|---|--|
| <input type="checkbox"/> Bending                      | <input type="checkbox"/> Bend           | <input type="checkbox"/> Grain                           |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route      | <input type="checkbox"/> Hardware                        |
| <input type="checkbox"/> Cracks                       | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete           |
| <input type="checkbox"/> Crushed/Crimped              | <input type="checkbox"/> Burrs          | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs                        | <input type="checkbox"/> Contamination  | <input type="checkbox"/> Maintenance                     |
| <input type="checkbox"/> Heat Treat                   | <input type="checkbox"/> Countersink    | <input type="checkbox"/> Mislabeled                      |
| <input type="checkbox"/> Inspection Strip in Tube     | <input type="checkbox"/> Cut Too Short  | <input type="checkbox"/> Misread                         |
| <input type="checkbox"/> Ripples in Bend              | <input type="checkbox"/> Drill Holes    | <input type="checkbox"/> Offset                          |
| <input type="checkbox"/> Torque Waves in Extrusion    | <input type="checkbox"/> Drawing        | <input type="checkbox"/> Out of Calibration              |
| <input type="checkbox"/> Turning Sequence             | <input type="checkbox"/> Finish         | <input type="checkbox"/> Out of Sequence                 |
| <input type="checkbox"/> Wave/Twist in Tube           | <input type="checkbox"/> Folio          | <input type="checkbox"/> Outside Dimensions              |
|   |   | <input type="checkbox"/> Ovalized                        |
|   |   | <input type="checkbox"/> Over/Under tolerance            |
|   |   | <input type="checkbox"/> Part Incorrect                  |
|   |   | <input type="checkbox"/> Part Lost/Missing               |
|   |   | <input type="checkbox"/> Part Moved                      |
|   |   | <input type="checkbox"/> Positioned Wrong                |
|   |   | <input type="checkbox"/> Power Loss/Surge                |
|   |   | <input type="checkbox"/> Pressure/Forced                 |
|   |   | <input type="checkbox"/> Temperature/Cure                |
|   |   | <input type="checkbox"/> Weld                            |
|   |   | <input type="checkbox"/> Wrong Stock Pulled              |
|   |   | <input type="checkbox"/> Other                           |

# Picklist Print

July-19-12 3:35:24 PM

Page 1

Work Order ID: 87953

\*87953\*

Parent Item: D2423

\*D2423\*

Parent Item Name: Lug Extrusion

Start Date: 19/07/2012

Required Date: 02/08/2012

Start Qty: 288.00

Required Qty: 288.00

Comments: IPP G04.09.02Part Number D2423-108 changed to D2423KJ/JLM

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D2423P                          |                        | Purchased     | No          |                     |                  | 100             | f                  | 0.0000         | 1           | 288          |               |                |        |

\*D2423P\*

Lug Extrusion

\*\*

288 8/12/12

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Skid-tube <input type="checkbox"/></td> <td style="width: 25%;">Crosstube <input type="checkbox"/></td> <td style="width: 25%;">Water Jet <input type="checkbox"/></td> <td style="width: 25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Setup         |      |      |     |   |                   |                    |             |              |              |
| Other         |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

**FAULT CATEGORY**

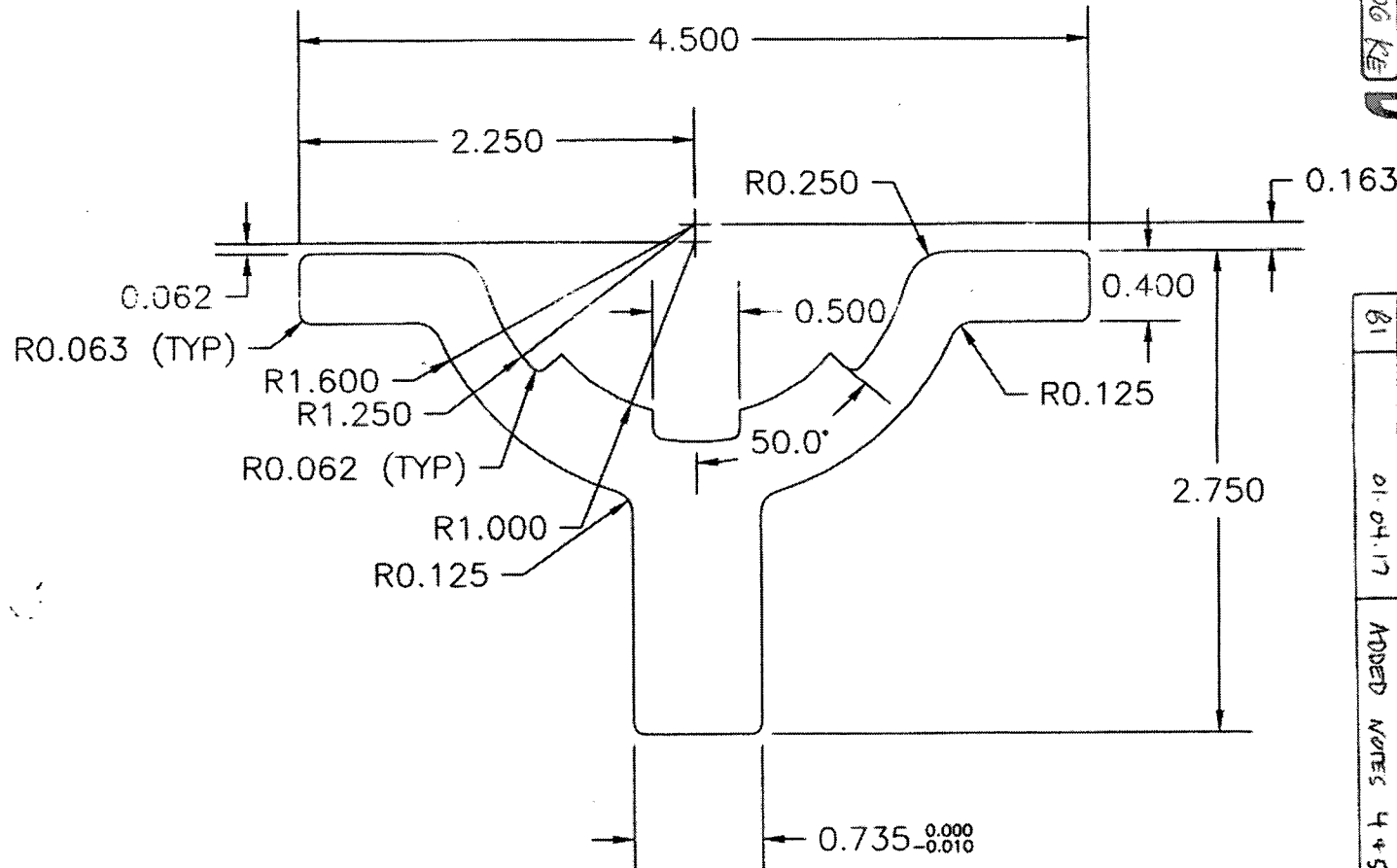
| Landing Gear  | General                                 | Other  |
|---|---|--|
| <input type="checkbox"/> Bending                      | <input type="checkbox"/> Bend           | <input type="checkbox"/> Grain                           |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route      | <input type="checkbox"/> Hardware                        |
| <input type="checkbox"/> Cracks                       | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete           |
| <input type="checkbox"/> Crushed/Crimped              | <input type="checkbox"/> Burrs          | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs                        | <input type="checkbox"/> Contamination  | <input type="checkbox"/> Maintenance                     |
| <input type="checkbox"/> Heat Treat                   | <input type="checkbox"/> Countersink    | <input type="checkbox"/> Mislabeled                      |
| <input type="checkbox"/> Inspection Strip in Tube     | <input type="checkbox"/> Cut Too Short  | <input type="checkbox"/> Misread                         |
| <input type="checkbox"/> Ripples in Bend              | <input type="checkbox"/> Drill Holes    | <input type="checkbox"/> Offset                          |
| <input type="checkbox"/> Torque Waves in Extrusion    | <input type="checkbox"/> Drawing        | <input type="checkbox"/> Out of Calibration              |
| <input type="checkbox"/> Turning Sequence             | <input type="checkbox"/> Finish         | <input type="checkbox"/> Out of Sequence                 |
| <input type="checkbox"/> Wave/Twist in Tube           | <input type="checkbox"/> Folio          | <input type="checkbox"/> Outside Dimensions              |
|   |   | <input type="checkbox"/> Ovalized                        |
|   |   | <input type="checkbox"/> Over/Under tolerance            |
|   |   | <input type="checkbox"/> Part Incorrect                  |
|   |   | <input type="checkbox"/> Part Lost/Missing               |
|   |   | <input type="checkbox"/> Part Moved                      |
|   |   | <input type="checkbox"/> Positioned Wrong                |
|   |   | <input type="checkbox"/> Power Loss/Surge                |
|   |   | <input type="checkbox"/> Pressure/Forced                 |
|   |   | <input type="checkbox"/> Temperature/Cure                |
|   |   | <input type="checkbox"/> Weld                            |
|   |   | <input type="checkbox"/> Wrong Stock Pulled              |
|   |   | <input type="checkbox"/> Other                           |

SHOP COPY

RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 87953

RELEASED  
98/08/06 KE

**DART**



| DESIGN   | DRAWN BY      | DART AEROSPACE LTD          |
|----------|---------------|-----------------------------|
| LE       | KE            | HAWKESBURY, ONTARIO, CANADA |
| CHECKED  | APPROVED      | DRAWING NO.                 |
| KE       | KE            | D2423                       |
| DATE     | TITLE         | REV. B                      |
| 98.08.04 | LUG EXTRUSION | SHEET 1 OF 1                |
| A        | 95.05.09      | NEW ISSUE                   |
| B        | 98.08.04      | 6061-T6 WAS 6005A.T5        |
| B1       | 01.04.17      | ADDED NOTES 4 & 5           |
|          |               | SCALE 1:1                   |

1. MATERIAL: 6061-T6 ALUMINUM (QQ-A-200/8)
2. NOTE: ALL DIMENSIONS ARE IN INCHES
3. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4. MANUFACTURED USING CARADON INDALEX DIE # MS-18866
5. PART NUMBER IS D2423-XXX WHERE XXX IS CUT LENGTH IN INCHES (EG. D2423-108 IS 108" LONG)

SIGNATURE  
aluminum  
CANADA INC.

ACCT# 46024

INVOICING AND COMPANY LOCATION

SHIPPING MANIFEST

SIGNATURE ALUMINUM CANADA  
1850 CLEMENTS ROAD  
PICKERING ON L1W 3R8

MANIFEST DATE / DATE DU BODEREAU  
08-19-12

MANIFEST NUMBER / N° DE BODEREAU  
007109

SALES ORDER NUMBER / N° DE COM  
106674

|  |   |
|--|---|
| SHIP TO / EXPÉDIÉ À<br>DART AEROSPACE LTD.<br>1270 ABERDEEN ST.<br>HAWKESBURY, ON K6A 1K7<br>CANADA<br><br>PHONE: 613-632-5200 | SOLD TO / VENDUE À<br>DART AEROSPACE LTD.<br>1270 ABERDEEN ST.<br>HAWKESBURY, ON K6A 1K7<br>CANADA<br><br>PHONE: 613-632-5200 |
|--|---|

TERMS / FREIGHT  
  
PP

REFER TO  
THESE NUMBERS ON  
ALL CORRESPONDANCE

REFEREZ-VOUS A CES  
NUMEROUS POUR TOUTE  
CORRESPONDANCE

|  |                                    |  |                                 |   |   |
|--|------------------------------------|--|---------------------------------|---|---|
| CUSTOMER ID / ID DU CLIENT<br>46024                    | ORDER DATE / DE LA COM<br>07/24/12 | CUSTOMER PO NUMBER / CLIENT PO Nombre<br>17513 | JOB / FICHIER                   | FIELD SALES REP / REP REGIONAL DES VENTES<br>G.ATTENBOROU | CUST SERVICE REP / REP SERVICE CLIENTELE<br>DLB |
| BILL OF LADING NUMBER / NO. DE CONNAISSÉMENT<br>007109 |                                    |  | CARRIER / TRANSPORTEUR<br>JODEE |   |   |

| ITEM NO. / NUMÉRO | ORIGINAL ORDER QUANTITY / Quantité d'ordre ORIGINAL | UNIT / UNITÉ | PREVIOUS SHIPPED QUANTITY / PRÉCÉDENT Quantité livrée | MFG. PART NUMBER / MFG. PARTIE NUMÉRO | ALLOY & TEMPER / ALLIAGE & TEMPER | FINISH DESCRIPTION / DESCRIPTION DE FINITION | NBR OF PKGS / NBR DE PKGS | GROSS LBS / LIVRES BRUT | NET QUANTITY / QUANTITÉ NETTE | UNIT / UNITÉ | QUANTITY DUE / Quantité en raison |
|-------------------|---|--------------|---|---------------------------------------|-----------------------------------|--|---------------------------|-------------------------|-------------------------------|--------------|-----------------------------------|
| 001               | 1,109   | LB           |   | DAA-5-2                               | 6061 T6                           |  | 1                         | 1,116                   | 1,105                         | LB           |                                   |
|                   | 503   | KG           |   | D2423P                                | 96.0000 IN                        |  |                           | 506                     | 501                           | KG           |                                   |
|                   | 36  | PC           |   |                                       | Cut(+): 0.1180 Cut(-): 0.0000     | Min: -10 % Max: 10 %                         |                           |                         | 37                            | PC           |                                   |
|                   |   |              |   |                                       |                                   |  | 814972 / 151519           | 1                       | 1,116                         | 1,105        | 37 PC                             |

88 12-8-22

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping manifests and signed and dated below by customers authorized representatives.  
No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping manifest were produced in accordance with the fair labor standards act of 1938 as amended. Order accepted subject to the terms and conditions stated on the reverse side.

Page 1

|        |       |       |    |
|--------|-------|-------|----|
| 1      | 1,116 | 1,105 | LB |
|        | 506   | 501   | KG |
|        |       | 37    | PC |
| TOTALS |       |       |    |

CUSTOMER ACKNOWLEDGEMENT OF GOODS DELIVERED AND CONDITION

DATE OF DELIVERY

DRIVER



# CERTIFICATE OF COMPLIANCE

## SIGNATURE ALUMINUM CANADA

1850 CLEMENTS RD  
PICKERING, ON L1W 3R8

| Cert Date  | Cert No. | Sales Order | Page     |
|------------|----------|-------------|----------|
| 08/13/2012 | 5287964  | 106674      | 1        |
| Cust PO    | B/L No   | Lot         | Date     |
| 17513      | 007109   | 814972      | 08/19/12 |

| Sold To   | Ship To   |
|---|---|
| 46024<br>DART AEROSPACE LTD.<br>1270 ABERDEEN ST.<br>HAWKESBURY, ON K6A 1K7<br>CANADA | 46024<br>DART AEROSPACE LTD.<br>1270 ABERDEEN ST.<br>HAWKESBURY, ON K6A 1K7<br>CANADA |

| Item No.                  | Part No.         | Item Description | Cust Part |
|---------------------------|------------------|------------------|-----------|
| 001                       | DAA-5-2          | 8 MILL 6061 T6   | D2423P    |
| Gross Weight              | 1,116 LBS        |                  |           |
| Net Qty                   | 1,105 LBS 37 PCS |                  | 1 PKG     |
| Specification             |                  |                  | Die Desc  |
| AMS QQA 200/8 + ASTM B221 |                  |                  |           |

DAS  
16  
17/09/14

### Mechanical Tests:

| Tensile      | Yield        | % Elongation | Conductivity | HRE |
|--------------|--------------|--------------|--------------|-----|
| MPA / KSI    | MPA / KSI    |              |              |     |
| 323.5 / 46.9 | 297.3 / 43.1 | 16.8         | N/A          | 93  |

### Chemical Analysis:

| SI   | FE   | CU   | MN   | MG   | CR   | ZN   | TI   | V    |
|------|------|------|------|------|------|------|------|------|
| 0.65 | 0.28 | 0.21 | 0.06 | 0.87 | 0.05 | 0.07 | 0.02 | 0.01 |

SP 12-8-22

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

S. Mazzotta, Director of Quality Signature Aluminum Canada Inc

Carrier: JODEE

TRL 5300

on 08/19/12

Shippers No: 007109

From: SIGNATURE ALUMINUM CANADA

1850 CLEMENTS ROAD

PICKERING ON L1W 3R8

FIELD NO. SHIPPER'S REQUEST

EMIS A LA DEMANDE DE L'EXPEDITEUR

It is hereby agreed that the classification and tariffs in effect on the date of issue of this Original Bill of Lading, or received, subject to the Rules for the Carriage of Express and Non-Carriage Freight Traffic and other applicable provisions of the date of issue of this Original Bill of Lading, goods described below, in apparent good order, except as noted hereon, and conditions of contents of packages unknown, marked, consigned and delivered as indicated below, which said Company agrees to carry to its usual place of delivery at said destination, if on its road, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier or of all or any of said goods over all or any portion of said route to destination, and as to each party at any time interested in all or any of said goods, that every service to be performed hereunder shall be subject to the terms and conditions which are hereby incorporated by reference and have the same force and effect as if the same were severally fully and specifically set forth herein.

1. Rail-way Traffic Liability Regulations (SOR/96-188 August 14, 1997) passage of the National Transportation Act, 1987.
2. In the Bill of Lading of the water carrier as provided in its tariffs of rules and regulations when said goods are carried by a water carrier or
3. In the Bill of Lading set forth in or prescribed by the relevant tariffs, classification, charges and regulations pertaining to motor carriers services when said goods are carried throughout by a motor carrier or
4. In the Bill of Lading in force by C.P. 1925 of January 15, 1988 when said goods originating in Quebec are to be carried by a motor carrier.
5. Or approved by the Board of Transport Commissioners for Canada by General Order No. T-43, set forth in the Rules for the Carriage of Express and Non-Carriage Freight Traffic and also available at all express and railway agency stations and express and freight offices upon request, when said goods are carried by a rail carrier, and which are agreed to by the shipper and accepted for himself and his assigns.

Reçu, sous réserve des classifications et tarifs en vigueur à la date de livraison de ce connaissement original, du sous réserve des règlements régissant le transport des marchandises de détail et des tarifs en vigueur à la date de livraison de ce connaissement original, les marchandises désignées ci-dessous, apparemment en bon état, sauf les remarques contenues aux présentes, le contenu et l'état du contenu des colis étant inconnus, marqués et consignés tel qu'après indiqué, et que la Compagnie s'engage à transporter à destination à son lieu habituel de livraison, pourvu que cette destination soit sur son parcours. Sous réserve que si un autre porteur (faute de mieux) est désigné, le fait de plus convenir que tout volume en transportant tout ou partie des marchandises sur tout ou partie du parcours, que le destinataire s'engage à payer les frais de port et de transport, et que tous services prévus aux présentes seront assurés à toutes les conditions desquelles les porteurs sont intégrés aux présentes et ont la même force et le même effet que

1. Le Règlement sur la responsabilité à l'égard du transport (SOR/96-188, 14 août 1997) adopté en vertu de la loi de 1987 sur les transports nationaux.
2. Le connaissement du transporteur maritime, conformément aux dispositions et règlements en vigueur dans les tarifs d'application au transport par eau, ou
3. Le connaissement prescrit par les tarifs, classifications, statuts et règlements se rapportant aux services de camionnage si lesdites marchandises sont transportées par camion; ou
4. Le connaissement prescrit par l'article 2 du Décret 47-55 du 13 janvier 1988, si les marchandises sont expédiées de la province de Québec par camion.
5. Approuvées par l'ordonnance générale No. T-43 de la Commission Canadienne des Transports pour le Canada régissant le transport des marchandises de détail et dont le texte peut être obtenu sur demande à toutes les guichets de voyageurs et de marchandises, ainsi qu'à tous les dépôts de marchandises si lesdites marchandises sont transportées par un véhicule du rail, conditions auxquelles l'expéditeur s'engage à payer les frais de port et de transport, et que tous services prévus aux présentes seront assurés à toutes les conditions desquelles les porteurs sont intégrés aux présentes et ont la même force et le même effet que

Consigned To: DART AEROSPACE LTD.  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
CANADA

S/O: 106320

Freight: Prepaid

| No   | Description Of Articles              | LTL | Haz | Net   | Tare | Gross |
|------|--------------------------------------|-----|-----|-------|------|-------|
| Pkgs |                                      | Cls | Mat | Kgs   | Kgs  | Kgs   |
| 6    | Aluminum Lineal Shapes; Item 13515-A | 60  |     | 1,127 | 39   | 1,166 |

6 TOTAL 1,127 39 1,166

Shipper, Per J1DOLLIN  
SIGNATURE ALUMINUM CANADA  
1850 CLEMENTS ROAD  
PICKERING ON L1W 3R8

CANADA

| CARRIER - AGENT |    |    |    | CONSIGNEE - COMBINAIRE |    |    |    |
|-----------------|----|----|----|------------------------|----|----|----|
| DATE            | DU | MM | AA | DATE                   | DU | MM | AA |
|                 |    |    |    |                        |    |    |    |
| PER / PAR       |    |    |    | PER / PAR              |    |    |    |



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO17513

Purchase Order Date 7/20/12

PO Print Date 7/20/12

Page Number 1 of 1

Order From :

VC-BON001

SIGNATURE ALUMINUM  
1850 CLEMENTS ROAD  
PICKERING, ON L1W 3R8  
CA

Contact Name  
Vendor Phone 800 563 1079  
Vendor Fax 800 565 8339  
Vendor Account Nbr

Buyer Chantal Lavoie  
Requisition Nbr  
Tax Resale Nbr 10127-2607  
Terms Net 30  
Currency CAD  
FOB Destination-Collect

Ship To : DART AEROSPACE LTD 1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**FAKED**  
8/12/12

| Line Nbr | Reference<br>Revision ID<br>Vendor Part Number | Description/<br>Mfg ID | Req Date/<br>Taxable | Req Qty/<br>Unit of Measure | Ship Method | Unit Price | Extended<br>Price |
|----------|--|------------------------|----------------------|-----------------------------|-------------|------------|-------------------|
| 1        | D2423P   | Lug Extrusion          | 8/03/12<br>Yes       | ✓ 288.00<br>f               | Yours ppd   | \$11.7025  | \$3,370.1         |

Special Instructions: EXTRUDE AS PER DWG D2423 REV.B1  
B87953  
MATERIAL: 6061-T6 AS PER QQ-A-200/8  
ALL DIMENSION ARE IN INCHES  
SIGNATURE ALUMINUM TOOL # DIE  
DAA-5  
288FT = TO 36 PCS

SP 12-8-22  
PO Total: \$3,370.

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 7/20/12

u CY No substitution or deviation without  
consent.

Certificate of Conformity or Material  
Certification required YES NO